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PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re application of: Man Mohan Rai

Serial No: 10/043,044

Group No.: 2122

Filed: January 7, 2002

Examiner: Not Assigned

For: "A Hybrid Neural Network and Support Vector Machine Method for Optimization"

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Box Patent Application
Commissioner for Patents
Washington, DC 20231

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Technology Center 2100

**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT
WITHIN THREE MONTHS OF FILING OR
BEFORE MAILING OF FIRST OFFICE ACTION [37 C.F.R. 1.97(b)]**

**IDENTIFICATION OF TIME OF FILING THE ACCOMPANYING
INFORMATION DISCLOSURE STATEMENT**

1. The information disclosure statement submitted herewith is being filed within three months of the filing date of the application or the date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever event occurs last [37 C.F.R. 1.97(b)].

Reg. No.: 38,987

Robert M. Padilla

date

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Certificate of Mailing/Transmission (37 CFR 1.8(a))

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is, on the date shown below, being:

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Date: March 13, 2002

transmitted by facsimile to the Patent and Trademark Office.

Signature: Vickie L. Kent 03/13/02
Vickie L. Kent



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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Man Mohan Rai

U.S. Serial No: 10/ 043,044

Group Art Unit: 2122

Filing Date: January 7, 2002

Examiner: *not assigned*

Title: "A COMBINED NEURAL NETWORK-SUPPORT
VECTOR MACHINE FOR OPTIMIZATION"

Assistant Commissioner for Patents
Washington, D.C. 20231

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Supplement For Information Disclosure Statement Form 1449

Dear Sir:

The Applicants herewith submit Form 1449, relating to an Information Disclosure Statement for the above-identified patent application and herewith submit a photocopy of, and a summary of the relevance of, each of the I.D.S. references.

M.M. Rai et al, "Aerodynamic Design Using Neural Networks." This article discusses a pure neural network approach for identifying or designing a shape of an aerodynamic component, using polynomial approximations to construct a composite response surface. In one example, a target pressure distribution along a turbine airfoil is used to determine an appropriate airfoil shape.

V.N. Vapnik, "An Overview of Statistical Learning Theory." This article discusses the mathematics of separate use of neural network learning algorithms and support vector machines and use of separating hyperplanes in a modeling space.

Date: February, 2002

March 12, 2002

Respectfully Submitted

Robert M. Padilla

Robert Padilla

Patent Attorney for Applicant

Reg. No. 38,987